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ABSTRACT

This longitudinal study evaluated the effects of a preschool project designed to serve children between 3 and 5 years of age in a disadvantaged inner-city area in Dublin, Ireland. The preschool, established in 1969, emphasized the development of children's cognitive skills and established structures to increase parents' involvement in their children's formal education. Using an experimental group of 83 students who had attended the preschool and a control group of 53 students who had not attended the preschool, the study examined children's later educational careers, first experiences with work, leisure activities, and social deviance during adolescence. Most data were obtained when subjects were 16 years old. No significant differences between the groups in regard to placement in special education, absenteeism and truancy from school, and the incidence of behavior problems in school were found. No difference between the groups in work experience at the age of 16 was found, nor did the groups differ greatly in their leisure activities. However, members of the experimental group stayed longer in school than members of the control group, and a greater proportion of the experimental group than the control group took public examinations. Findings generally indicated that while the early performance of the experimental group was promising, the initial level of performance was not maintained. (MM)

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The educational development of students following participation in a pre-school programme in a disadvantaged area in Ireland

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Editorial history

This paper has been specially written for the Bernard van Leer Foundation. It is the first report of the findings of a longitudinal study about a cohort of Irish children who had attended a special pre-school programme. The study followed them until they were aged 16 years.

An earlier publication on the project, *Rutland Street: the story of an educational experiment for disadvantaged children in Dublin*, by the project director Séamas Holland, was published by the Foundation and Pergamon Press in 1979.

The follow up study will be the subject of a book, to be published in 1993.

About the authors

Thomas Kellaghan is a graduate in psychology of the Queen's University of Belfast. He is director of the Educational Research Centre at St. Patrick's College in Dublin. His books and papers deal with a variety of educational topics including assessment, disadvantage, school effectiveness, and equity issues.

Betty Jane Greaney is a graduate in Educational Research, Measurement and Evaluation. She was formerly a Research Fellow at the Educational Research Centre at St. Patrick's College in Dublin. Her research interests and publications relate to early childhood education, and evaluation.

About the project

From June 1969 until 1974 the Irish Department of Education, supported by the Bernard van Leer Foundation, developed a special pre-school programme to help and support young children and their families living in the Rutland Street area of Dublin – a severely disadvantaged section of the city.

The project provided a special two-year programme for children aged three to five years of age, before they moved into the formal education system. It also, and centrally, involved parents and, to a lesser extent, community – something which was not then common practice in educational provision.

In the language of the time, this project was seen as an 'intervention' programme, and the question remained whether such 'interventions' actually had any impact, not only in the short term but, even more important, on subsequent long term outcomes of children's life chances.

The Rutland Street children therefore became the subject of a longitudinal study, which followed up their progress throughout their school careers, and beyond into adult life. This paper reports on the results.

Bernard van Leer Foundation

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Introduction

The problems of children who live in areas that have come to be known as 'disadvantaged' came sharply into focus in the 1960s. These areas were usually located in cities and were characterised by heavy concentrations of poor housing, high proportions of unskilled and unemployed workers, and a high rate of educational failure. The poor educational performance of the children in these areas was seen to be a cause for serious concern in the context of achieving equality of educational opportunity, and in terms of a serious loss of talent to nations. Major efforts were made, particularly in the United States, to develop programmes to help such children at various stages during their educational careers. Particular attention was paid to strategies to help prepare children for the formal work of school, either in pre-school centres or in home-based programmes.

One of the earliest approaches to dealing with disadvantage in Europe was developed in Dublin by the Department of Education of the Irish Government in collaboration with the Bernard van Leer Foundation. Following discussion over a period of time, a pre-school was established in 1969 to cater for children between the ages of three and five years in a disadvantaged inner-city area known as Rutland Street. A major aim of the pre-school was to assist children in developing their cognitive skills and, by so doing, to prepare them for the work of the primary school. A steering committee composed of representatives of local and national educational interests, chaired by Tomás ó Cuilleanáin of the Department of Education, was set up to oversee the development and implementation of the project.

An evaluation of the project was carried out by the Educational Research Centre at St. Patrick's College, Dublin during the five years it took the first cohort of children to progress through the pre-school centre and the three junior grades of primary school. The findings of the evaluation were not dissimilar to the findings of similar evaluations elsewhere, indicating that children made good progress during their attendance at the pre-school centre, but tended to drop back in primary school. Following completion of the initial formal evaluation, the Educational Research Centre decided to remain in contact with the participants of the study and to monitor their later educational careers, their first experiences with work, their leisure activities, and evidence of social deviance during adolescence.

The purpose of this paper is two-fold. First, it describes the major features of the project and the initial findings of the evaluation – these have already been published.[1] Second, it provides in summary form a description of the findings of a follow-up study – these have not yet been published.[2]

At this point it should be acknowledged that both the nature of the programme that was developed, and the manner in which it was evaluated reflected thinking at the time about disadvantage and evaluation.

The programme was implemented in a centre attached to a primary school and so can be regarded as being essentially school-based rather than family or community-based – although efforts were made to involve parents. The activities that were designed for children were based on the view that children were disadvantaged if, for socio-cultural reasons, they entered the school system with knowledge, skills and attitudes which made adjustment difficult and which impeded learning.[3] This definition, and programmes which have been based on it to assist children's development, have often been criticised for implying the existence of deficiencies in children and in their homes. Whatever view one adopts about deficiency, few would doubt that when children first enter school, there are differences between them in their ability to adapt to the work of the school; differences which are due, at least in part, to the varying familial experiences of the children. But whether or not the characteristics of some children and of some homes are regarded as 'deficient' would seem to arise more from a valuation of the differences than from their recognition.

The evaluation of the project was based on a quasi experimental design in which the participants (the experimental group) were compared at the end of the project. Comparisons were made on a wide range of home achievement and personality variables with a group of children who were judged to be equivalent to the experimental group in every way except for the fact that they had not taken part in the pre-school programme (the control group). The evaluation was not limited to this comparison, however. Information was also obtained on the development of the children in the 'experimental group' as they progressed through the programme, and the views of their parents on the effects of the project were also solicited. However, detailed information on how the programme was implemented and on how individual children and families reacted to it – which is often obtained in programme evaluation today – was not obtained.

The pre-school project

Context

The project was located in an area in which poverty and male unemployment were common, and in which many mothers had to seek part-time work to supplement family incomes. About three quarters of the population lived in two or three roomed apartments. Levels of parental education were low: for example, only three per cent had passed the former school leaving certificate examination at the end of their primary education. In a series of studies carried out in the 1960s, children between the ages of nine and thirteen living in the area had mean scores that were more than one standard deviation below the national means for tests of scholastic ability and achievement in reading and arithmetic.[4]

The pre-school centre

The centre had six teaching/learning areas each designed to accommodate a group of 15 children, and a central general purposes area. Children attended for two and a half hours a day, either in the morning or the afternoon. Each of six primary school teachers, assisted by a classroom aide, was responsible for a

1. Holland, S. (1979) *Rutland Street.* The Hague: Bernard van Leer Foundation and Oxford: Pergamon; Kellaghan, T (1977) *The evaluation of an intervention programme for disadvantaged children.* Slough, Berks: NFER Publishing Co.

2. A more detailed report of the follow-up study is being prepared by Betty Jane Greaney and Thomas Kellaghan.

3. Passow, A.H. (1970) *Deprivation and advantage: nature and manifestations.* Hamburg: UNESCO Institute for Education.

4. Carney, M., Chamberlain, J., Garvey, C., McGee, P and Quinn, P. (1970) *Rutland Street research project.* Dublin: Department of Psychology, University College, Dublin.

morning and an afternoon group. The centre also had a Project Director (Seamas Holland, seconded from the Department of Education), a principal teacher (Kathleen Day), and three social workers. Altogether 90 three year old children (all of those eligible in the area) entered the centre when it opened in 1969.

After two years in the centre it was planned that the children, now aged five, should proceed to an adjacent junior primary school. Many did, although several went to other schools. On completion of the junior school grades, at about the age of eight years, the children proceeded to the senior grades of a primary school.

While it was presumed that teachers in the junior school would adapt the school curriculum to suit the needs of the particular group of children, the main thrust of the experimental programme was in the pre-school centre, not in the junior school. The description of the programme that follows relates only to the pre-school level.

The pre-school centre programme

Major tasks facing personnel involved in the project were the development of appropriate activities for children in the centre, and the establishment of structures to increase parents' involvement in their childrens' formal education.

Although inspired to some extent by the Head Start programme which had begun as part of the 'War on Poverty' legislation of the Johnson Administration in the United States in 1965, the nature of activities in the centre was most heavily influenced by practice in earlier small scale local American projects. These included the Early Training Project at George Peabody College in Nashville, Tennessee[5], the Perry Pre-school Project at Ypsilanti, Michigan[6] and the Early Intervention Project in Gainesville, Florida[7]. The programmes in these projects were based on statements of scholastic objectives and involved careful planning, use of relevant materials, and high intensity of treatment. Compared with more traditional approaches to early childhood education which catered mostly for middle-class children, these programmes were more structured and teacher-directed, and emphasised cognitive and scholastic goals but without ignoring socio-emotional ones. At the time the Rutland Street centre started, only limited information was available about the effects of the American programmes.

The activities of the Centre were also strongly influenced by development theories based on Piaget's work. These emphasise the development of strategies in children to bring order, meaning and control to their environments. Such activities, while including many from traditional early childhood education, added a cognitive developmental perspective to them. Further, an approach based on Piaget's work served to focus the programme on the kinds of experiences that would be likely to promote the development of knowledge and skills which were thought to be important for later school success.

The cognitive aspect of the programme included activities designed to develop perceptual discrimination and skills related to classification, seriation, one to one correspondence, conservation, and the structuring of time and space. Other activities were designed to increase periods of concentration, and to promote the development of both selective attention, and flexibility in thinking.

Particular attention was paid to language development on the assumption that language plays a major role in cognitive functioning, intimately related to the ability to use flexible and abstract modes of thought. To promote language development, teachers involved pupils in simple activities using language to describe aspects of the environment, draw attention to the attributes of objects,

5. Klaus, R.A. and Gray, S.W. (1968) The Early Training Project for disadvantaged children: a report after five years. *Monographs of the Society for Research in Child Development*, 33 (4, Whole No. 120)

6. Weikart, D.P. (1967) *Preschool intervention: a preliminary report of the Perry Preschool Project.* Ann Arbor, MI: Campus Publishers

7. Gordon, I.J. (1973) *An Early Intervention Project: a longitudinal look.* Gainesville, FL: University of Florida, Institute for Development of Human Resources.

note similarities and differences between objects, classify objects, describe spatial and temporal relationships, and plan activities.

Finally, personality and social development of children were taken into account in activities which were designed to promote social knowledge (what is expected in various roles), social skills (what skills are necessary to meet the demands of different roles), and motivation.

While a broad outline of the programme was prepared as a framework, it was left to teachers to devise precise activities that reflected the general principles of the programme. Wherever possible, individual activities represented developmental needs across all areas – cognitive, language, personality and social.

Parents

The project sought to involve parents as much as possible in the work of the Centre. All the children's homes were visited by teachers before the project began. Then social workers visited families to make parents aware of the aims and functions of the Centre, although they were often diverted into solving financial and social problems in the home. Parents were encouraged to come with their children to the Centre, to spend time in the classroom, and to participate in activities. Parent-teacher meetings were held regularly and a mothers' club was established.

While fathers did not usually attend parent-teacher meetings, they gave many indications of their willingness to support the project as, for example, when they patrolled the Centre at night to protect it from vandalism.

Throughout the life of the project, every effort was made by Centre staff to build up relationships with parents which were based on understanding and mutual respect. They also wanted to convince the parents that they had an important contribution to make to their children's success at school.

Effects

A number of procedures were adopted to obtain information on the progress of children during the course of the project. Psychological and educational tests were carried out when children entered the programme in order to obtain information on their levels of scholastic ability, language development, perceptual development, and preparedness for school. Teachers also rated the children on a range of personality variables, and social workers carried out a detailed assessment of their homes. A scholastic ability test was administered at the end of each year in the pre-school centre, and at the end of each of the three following years when the children were in their primary schools. At the end of this period, when the children were eight years of age, a series of perceptual, language and school achievement tests were carried out. Teachers again rated children on personality characteristics, and their home environments were also reassessed.

At the beginning of the project, a group of 60 eight year old children had been selected from the geographical area in which programme participants lived, to act as a 'control group'. The children of this group were five years older than the children of the experimental group. However, they were thought to be more similar to the experimental children than the children of any other group that might be available for comparative purposes (for example, children of similar age but living in another area). At the beginning of the project, information was obtained on the control group, using the same measures as would be used with the experimental group when its members reached the age of eight.

The evaluation itself was conducted over the two years the children spent in the Centre, and the following three years they spent in junior primary school. Its findings indicate that, by the end of the pre-school period (when the children were five years of age), significant improvements had occurred in their performance on tests of scholastic ability, vocabulary, their ability to respond to verbal communication, and their knowledge of numerical concepts. In fact, the mean level of performance of the children on several measures now reached the mean level of the populations on which the tests had been standardised.

By the end of their three years in the junior school, however, the mean level of the scholastic performance of the children in the experimental group had deteriorated and was no longer equivalent to the performance of the standardised population. It was, however, still higher than that of the control group.

On all measures of scholastic ability and achievement, wide variations were found in the performance of the experimental group, this indicates considerable heterogeneity in the group on a range of measures. Variance in scholastic ability, however, decreased as the children grew older, and was also less than the variance within the control group. The decrease in variance reflected the poorer performance of initially high scorers, and the improved performance of initially low scorers. It would therefore seem that, initially at any rate, more 'able' children did not benefit as much from the programme than less able ones.

Girls did better than boys on an achievement (reading) test, and were also rated more highly by teachers on a number of personality measures (mood, persistence and self determination). However, personality variables did not discriminate between the two groups.

Differences were found when the children were eight years of age between the homes of the children in the experimental group, and the homes of the children in the control group. The homes of the former were rated more highly by observers in terms of: the general quality of the language and language models used by parents; in opportunities for language use; in guidance on matters relating to school work; and in the availability and use of materials and facilities related to school learning. Some parents reported that the extent of verbal communication between themselves and their children had increased during the life of the project, also saying that they made less use of corporal punishment. A good proportion read to their children every day, and a small number indicated that they had learned new ways of teaching their children.

The follow-up study

The findings of the initial evaluation seemed to confirm those about children from other programmes – principally the Head Start programme in the United States – where initial gains in measures of general ability also tended to disappear after intervention was terminated[8]. But other projects which more closely resembled Rutland Street than did Head Start were in the course of conducting longer term follow-up studies of participants. There were three reasons for undertaking these studies. First, it was believed that conclusions drawn from the Head Start studies were over pessimistic and might not apply to more focused programmes. Second, concern was growing that the initial evaluation findings were leading some professionals to underestimate the importance of early experience. This in turn might be expected to lead to reduced government spending on young children. Third, it was felt that new, more ecologically valid criteria could be developed, and that these would provide a more appropriate basis against which the outcomes of intervention programmes could be assessed.[9]

8. See, for example, Westinghouse Learning Corporation/Ohio University (1969). *The impact of Head Start. An evaluation of the effects of Head Start on children's cognitive and affective development.* 2 vols. Washington D.C: Office of Economic Opportunity.

9. See, for example, Royce, J.M, Darlington, R.B. and Murray, H.W (1983) Pooled analyses: findings across studies, in Consortium for Longitudinal Studies, *As the twig is bent ... Lasting effects of preschool programs.* Hillsdale, NJ: Lawrence Erlbaum Associates; Weikart, D.P. (1978). *Perry Preschool follow up Assessment of Young Adults.* Ypsilanti, MI: High/Scope Educational Research Foundation.

Interest in the long term outcomes of the Rutland Street Centre persisted after the initial evaluation had been completed, because the long term effects could have important implications for educational and social policy.

The follow-up study involved comparisons between students who had attended the pre-school centre (the experimental group in the original study) and a group of students who had not attended the centre (the control group in the initial study). There were three major aspects to this: first, the educational careers of the two groups were compared; second, the work experiences of the two groups on leaving school were compared; third, various aspects of the attitudes, leisure activities and social deviances of the two groups were examined.

Most of the follow-up data were obtained when individuals were 16 years of age. Because of the age differences between members of the experimental and control groups, there was a five year gap between the investigation of the control group (1977) and of the experimental group (1982). Additional data on the achievements of those students who stayed in school beyond the age of 16 were obtained at a later stage. Information was obtained through interviews with the young people, and through questionnaires which were sent to the schools which they had attended. The total follow-up cohort consisted of 83 of the original experimental group of 90, and 53 of the original control group of 60. Much of the fieldwork was carried out by Elizabeth McGovern who taught in the pre-school centre and was well known to the students and their families.

School experience

Placement in Special Education
A total of 13.3 per cent of the experimental group, and 7.5 per cent of the control group had been enrolled in primary schools in programmes for students with learning difficulties. The difference between the groups was not statistically significant.

Encouragement to attend secondary school
A significantly greater number (nine out of ten) of the experimental group than of the control group (two out of three) had received encouragement from someone within their homes to attend secondary school.

Absenteeism from school
There was no difference in absenteeism rates at age eight, or throughout secondary schooling, between the two groups. However, considerable variation was found within each group in absenteeism figures. Some students had very few absences, while others had extremely poor attendance records. Reasons given for absence were personal illness, having to babysit or go on errands, caring for a sick relative, and disliking some aspect of school.

Truancy
Nearly 33 per cent of the experimental group and slightly more than 40 per cent of the control group had been unlawfully absent from primary school on at least one occasion. Figures for secondary school were slightly lower. Boys in both groups were more likely than girls to be truant. The most frequently mentioned reason was disliking, or fearing, school.

Behaviour in school
At primary level approximately 60 per cent of pupils in each group had been removed five to ten times a year from a classroom for bad behaviour. At secondary school, almost 60 per cent of the experimental group and 77 per cent of the control group had been removed from a classroom, again from five to ten times per year, for bad behaviour.

Persistence in school

Nearly 20 per cent of the experimental group, and just over 33 per cent of the control group, had left school by the end of primary schooling, most of them before reaching the minimum statutory school leaving age (15 years).

Throughout their secondary schooling, a significantly greater proportion of the experimental than of the control group were to be found in school. At age 16, almost 17 per cent of the former, but only 7.5 per cent of the latter, were still at school. While 9.6 per cent of the experimental group completed the senior cycle, no one in the control group did. Girls were more likely to stay at school than boys. Despite the superior retention rate of members of the experimental group, their level of school participation was still well below that recorded by youths of similar age in the general population.

The most frequently cited reason for leaving school was dislike of school. The second most cited reason was economic: leaving to get, or at least seek, jobs. In some instances, family circumstances demanded it, although on the other hand, students who were still at school at 16 acknowledged the importance of parental influence in keeping them there.

A measure of reading achievement at age eight predicted 41 per cent of the variance in length of stay at school; a measure of scholastic ability predicted 38.4 per cent of the variance; a measure of the home environment 31.4 per cent; and a measure of children's personality 16.8 per cent. When the first three of these variables (which of course are interrelated) are combined, they predicted 52.2 per cent of variance in school stay. Thus, lack of success at school at the primary level was an important predictor of early school leaving[10].

Achievement

The measures of achievement used in the follow-up study were results in public examinations taken by students during the course of their secondary schooling. Performance in the examinations is important, not only because it provides nationally recognised qualifications, but also because students' future educational and vocational careers depend on it. There were three such examinations during the time students in this study were at school: the Day Group Certificate Examination (DGCE), taken by some students (usually pursuing vocational courses) at age 14 or 15; the more academic Intermediate Certificate Examination (ICE) taken at age 15 or 16; and the Leaving Certificate Examination (LCE) taken at age 17 or 18.

Students in the experimental group (13.4 per cent) were almost twice as likely to take the DGCE as were those in the control group (7.8 per cent). In the national population, 24 per cent of students took the DGCE examination.

At the Intermediate Certificate level, the experimental group (30.5 per cent) were almost three times more likely to have taken the exam than the control group (11.8 per cent). The difference is due primarily to the much higher participation rate of girls in the experimental group (34.9 per cent) than of girls in the control group (3.7 per cent). Nationally, about 80 per cent of girls and 70 per cent of boys sat the ICE at the time of the study.

Just under 10 per cent of the experimental group (seven girls and one boy), and no one from the control group, sat the LCE. Nationally, 73 per cent of girls and 58 per cent of boys were taking the examination at the time of the study. For those students who did sit the exams, differences between the two groups in the numbers who passed were not statistically significant. Among the experimental group, 9 of the 11 who took the DGCE passed, 13 out of 25 who took the ICE passed, and 6 of the 8 who took the LCE passed. Among the control group, 2 out of 4 students passed the DGCE and 3 out of 6 passed the ICE.

10. Numerous other studies confirm this finding, including Greaney, B and Kellaghan, T. (1984) *Equality of opportunity in Irish schools*. Dublin: Educational Company.

The performance of the one male student who took the LCE qualified him for admission into most faculties in the highly competitive university system, but he chose to go into immediate employment. One female student went to a third-level technical institution and completed a non-degree course at a later date.

Work experience

At age 16, approximately half of the members of each group were employed or involved in a training programme. Approximately 33 per cent of each group were unemployed. Only 1.2 per cent of the experimental group were unavailable for work by reason of being in detention or being disabled, compared with 7.5 per cent of the control group. These figures must be considered in the light of the fact that a greater proportion of the experimental group than of the control group were still at school when data was collected.

Individuals in both groups had similar labour force experiences, finding jobs in a variety of manual occupations. Most girls were in semi-skilled labour, the majority being machinists in the sewing industry. Approximately 50 per cent of the boys were trainees or apprentices; the remainder worked in partly skilled or unskilled jobs.

Leisure activities

The aspects of leisure time activity which were investigated included: hobbies; socialising with friends; TV viewing; listening to pop music; participation in organisations; and reading.

Significant differences between the experimental group and the control group were found for several leisure time activities. Members of the experimental group were more likely to have a hobby than were members of the control group. In fact, virtually all of the experimental group had at least one hobby. Indoor and outdoor sport was the most popular form of activity among individuals in both groups. Time spent viewing television was the same for both groups.

Members of the experimental group were more likely to be members of a team, a club or a group. Youth clubs and sports clubs were the most popular organisations among individuals in both groups.

Neither experimental group, nor control group members spent much time reading. Considerably more than half had not read a book in the three month period prior to interview. Those who did read were more likely to have read fiction than non fiction, and the quality of the fiction was poor, being mainly confined to popular books, often of an ephemeral nature. In general, differences between the groups in leisure book reading patterns were not significant. When significant differences did appear, however, they tended to favour members of the experimental group: a greater proportion of these had read at least one book in the three months preceding the survey. Reading of low quality fiction books was more prevalent among the control group, while job related/hobby type materials attracted more individuals in the experimental group. Compared to members of the control group, students in the experimental group were more likely to read fiction books that were classified as adult.

Newspaper reading was the most common reading activity: nine out of ten respondents had read a newspaper in the week preceding the interview. Much of the reading, however, seemed to be of a rather cursory nature, being mainly confined to glancing at headlines and obtaining information on TV programmes, movies and discos.

Magazine reading was more popular among those in the control group. In particular, more girls in this group preferred romance magazines. Comic book reading appeared to be more popular than either books or magazines in both groups. The most popular types were juvenile and romance comics.

Social deviance

No difference was found between the groups on the one negative aspect of social development that was investigated. Similar percentages of both groups (approximately 20 per cent) had exhibited some form of social deviance and had been in trouble with the police. With one minor exception, the types of delinquent acts were similar for the two groups.

However, important gender differences were found. Irrespective of group, boys were much more likely than girls to be in trouble with the police. Delinquency appeared to be related to early school leaving; those in trouble had either left primary school early; dropped out at the end of primary school; or left before completing the junior cycle in a vocational school. Unemployment was also related to being in trouble. The overwhelming majority of individuals who had committed offences were either unemployed or in marginal employment.

Conclusions

The findings of the evaluation concerning the immediate and longer term effects of the early childhood education programme described in this paper show that such a programme can partially offset the negative effects of disadvantage, and produce significant educational benefits for some children.

In fact, the initial impact of the programme was very strong, especially during the two years the children spent in the pre-school centre between the ages of three and five. If one were to judge from the standardised test performances of the children at this stage, without knowledge of their background, one would have predicted a normal performance in their future school careers for many of them. That, however, did not happen.

One possible explanation is that the project succeeded in improving the children's test performance; but it did not actually increase their knowledge and skills to the extent that the test results indicated. It is indeed likely that children who had experience in a pre-school would develop skills which would be advantageous in taking tests.

However, this seems unlikely to account fully for the superior performance of members of the experimental group, given the differences which emerged between them and the control group members later in their educational careers. Further, test performance at age eight was found to predict aspects of later school performance reasonably well, suggesting that the tests at age eight and at a later stage were measuring something more basic than test taking skills. Measures of reading achievement, and of ability at age eight, predicted almost half the variance in students' subsequent length of schooling. This figure is very close to the 50 per cent of achievement variance at age 18 which Bloom, on the basis of analyses of data obtained from normal population groups, concluded could be predicted from achievement measures at age nine.[11]

But while the early performance of the experimental group was promising, it was clear by the age of eight that the initial level of performance was not being maintained. Further, in the follow-up study the similarity of experiences of members of the experimental group and of comparable individuals who had not had the benefit of a special pre-school programme, is striking on a variety of measures. There were only slight differences between the groups in several areas

11. Bloom, B.S. (1964) *Stability and change in human characteristics*. New York. Wiley.

of school experience: most notably the numbers who had been placed in a special education setting; the extent of absenteeism and truancy; and the incidence of behaviour problems in school.

There was no difference, either, in early work experience at the age of 16. Neither did members of the groups differ greatly in their leisure activities: for example, little time was spent reading. When differences were found, however (for instance, in the quality of material that was being read), they reflected a higher level of cultural activity among members of the experimental group.

In general, these findings may be taken as evidence of the extent of the problems – social as well as educational – which beset children growing up in a disadvantaged area. There were, however, differences between the groups in two important areas: members of the experimental group stayed on longer at school; and a greater proportion of them took public examinations, thus acquiring important qualifications on entering the labour market.

While 10 per cent of the experimental group completed the full cycle of secondary education, none of the control group did. Further, two of the experimental group qualified for entry to third level education, and one took up this option. Given the relationships between educational achievement, employment and delinquent behaviour – documented not only in our study but in many others – it is clear that the success of the project in raising the educational attainment and achievement levels of experimental group members was likely to have had important economic and social consequences for them.

In considering the successes of the project, it is worth noting that girls seemed to benefit more than boys. Girls' achievements at age eight were superior, and a greater proportion of girls than boys stayed on at school and sat for public examinations. Of the eight students who took the LCE, only one was a boy. Outside school, boys were more likely than girls to get into trouble with the police. The reasons for the greater impact of the programme on girls are not clear.

While the findings of this study point to the important role an early childhood education programme can play in the lives of children living in a disadvantaged environment, they also serve to underline the limited value of a single intervention for children who grow up in an environment beset by a great variety of problems. In the original evaluation of the pre-school project, reference was made to the need for continuing support for children's development. If the early achievements of children in early childhood education programmes were to be maintained and reinforced, this support should come from three sources: the family, the community and the school.[12]

A recognition of the need for family involvement was, of course, a major feature of the original project. While teacher-parent relationships were not considered in the context of contemporary concepts of empowerment, they did share some similarities with the empowerment approach. First, it was accepted, and conveyed to parents, that they were the primary educators of their children, and shared responsibility with teachers in supporting their children's development and furthering their school success. Second, communications with parents were carried out on the assumption that parents who are knowledgeable about what goes on in school, and about the school's expectations for pupils, are in a better position to do these things.

What was not provided for in the project was a continuation of this kind of involvement as the children progressed through their school careers. This was unfortunate since, of all the agencies that impact on a child's educational development, it is clear that the family is crucial. If for no other reason, because

12. Kellaghan, T. (1977) *The evaluation of an intervention programme for disadvantaged children*. Slough, Bucks: NFER Publishing Co.

it is in a better position than any other agency (including the school) to provide continuous, intense and long term support for the child.

In fairness to the project, it should be recognised that, at the time it was operating, there was little enthusiasm in Ireland for basic changes in the relationships that existed between parents and teachers, particularly in disadvantaged areas.[13] That the situation has changed considerably today is no doubt due to some extent to the pioneering work carried out in the Rutland Street project. Many teachers now welcome wholeheartedly the Home School Community Liaison Scheme which was established in 1991 by the Department of Education in 56 schools in disadvantaged areas. This promotes active cooperation between home, school and community in promoting the educational interests of children.

Broader community involvement, now a feature of many development programmes in disadvantaged areas, including the recently launched scheme in Ireland, was less conspicuous in the original Rutland Street project. Perhaps a greater involvement of other community agencies at the time would have led to the establishment of more permanent structures, which would have been able to contribute to the continuing support of the educational and social development of children in the area.

Apart from the lack of such community support, problems concerning the role of the school must also be acknowledged. It was noted that intensive efforts to adapt educational procedures to the children's needs, aptitudes and interests occurred only during the two years the children spent in the pre-school centre. While some attempts to do the same were made in the junior school adjoining the pre-school, these were not as intensive. Besides, some of the children did not attend this school. Children who got as far as secondary school were unlikely to find any very serious attempts being made to meet their special needs.

This point is supported by an analysis of progress through the system of children with differing levels of achievement. While lower achieving pupils seemed to gain most during the pre-school period, on entering the 'normal' school system it was the higher initial achievers who were most likely to persist in school and to take public examinations. This is what one would expect in an educational system which sets out to distribute its benefits on the basis of general scholastic ability.[14]

If schools perceive their primary task as one of reinforcing and rewarding the achievements of students who adapt readily to the demands of the educational system, students of relatively low scholastic ability and achievement are likely to find the curricula and facilities provided are inadequate for their needs. This is especially so at the secondary school level, where curricula tend to be dominated by the demands of public examinations and so, in their present form, do not meet the needs of all students.[15]

Given this situation, the limitations of what an individual school can do in adapting to the needs of all its students must be clearly recognised. Schools try to prepare as many students as possible for examinations, even though these are not designed for low achieving students. They do this to avoid the risk of placing some students at a disadvantage in the race for credentials. A central decision and a change in the public evaluation of scholastic credentials will be required before curricula and examinations can be altered to take account of the full range of abilities, achievements and needs which are represented among students. Until such a decision is made, individual schools will inevitably be inhibited in their efforts to develop the talents of all students, especially those from disadvantaged backgrounds. And this will be true at all levels of the educational system, and not just during the early school years.

13. Holland, S. (1979) *Rutland Street*. The Hague: Bernard van Leer Foundation, and Oxford: Pergamon.

14. Greaney, V. and Kellaghan, T. (1984). *Equality of opportunity in Irish schools*. Dublin: Educational Company.

15. Kellaghan, T. and Lewis, M. (1991) *Transition education in Irish schools*. Dublin: Educational Company.

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